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Trust—in Geography

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Abstract

Trust is central to the social world and to the knowledge claims we make as academics. Yet trust has not been a central focus of research in human geography. The paper examines the widespread divergent attention given to trust in disciplines other than geography and considers the limited research on trust in geography. Trust, the paper claims, is geographical in several senses. Distinction is made between the spatial dimensions of trust in the work of non-geographers; research on trust within geography; and trust in the performance of geography as a discipline and in geography's institutions. The paper argues that trust and trustworthiness are important but under-examined elements in all we do as geographers.

Keywords

Trust, Trustworthiness, Epistemology, Geography

‘Without trust, the everyday social life we take for granted is simply not possible’ (Good, 1988: 32)

‘The whole fabric of research is trust’ (Hardwig, 1991: 693)

I Introduction

Trust is a vital component of modern society. We speak commonly of trust in politicians and in the institutions of government, of trust in doctors, in science and in scientists, of trust in expertise, or of the trust placed in an organisation and in its personnel. Questions to do with trust are prevalent in academic enquiry. Trust and its corollaries, trustworthiness and distrust, have been the focus of attention in moral philosophy (O’Neill, 2002a; Uslaner 2002), political science (Hardin, 2002), economics (Fukuyama, 1995), sociology (Barber, 1983; Gambetta 1998a, 1998b; Giddens, 1990; Heckscher, 2015; Luhmann, 1979; Misztal, 1996; Seligman, 1987; Sztompka, 1999), management and organizational studies (Möllering 2006), communication studies (Quandt, 2102), history (Hosking, 2006; 2014), the history of science (Shapin, 1994; 2010), science studies (Porter, 1995; Yearley, 2005), and bioethics and medicine (Critchley, 2008; O’Neill, 2002b). The topic has been the subject of methodological survey (Lyon, Möllering and Saunders, 2012a, 2012b; Marková and Gillispie, 2008) and of general review (O’Hara, 2004; Kohn, 2008; Sasaki and Marsh, 2012). The study of trust has its own academic journal, the *Journal of Trust Research*, established in 2011 as a reflection of burgeoning inter-disciplinary interest in the topic (Pi, 2011).

But there is no general agreement about what constitutes trust. Despite this widespread interest in the topic – perhaps because of it – there is no shared single definition. Neither, perhaps surprisingly, has there been sustained engagement with trust within human geography. This relative inattention is noteworthy given the recent rise and widespread

currency of research on trust in cognate disciplines. It might be argued, after all, that the ways in which geographers use trust merit scrutiny alongside those other societal issues which geographers work with in addressing human society – justice, inequality, development, and well-being to name only a few – and for precisely the same reasons. Like these and other issues vital to the explanation of human interaction, trust varies in its meaning within and among different social groups, over time, and over space. In sum, the topic is important, the subject of attention in many fields yet hardly at all in geography and is pervasive in social and political life. Trust should concern human geographers more than it has.

This paper has three aims. The first is to offer a review of recent work on trust and trustworthiness from a variety of disciplinary perspectives in the belief that it is important to the concerns and interests of human geographers. This review element, the basis to part II, makes no claim to completeness. It is, simply, to propose that the very centrality of the topic merits greater attention by geographers than has been the case to date and to hope, even from such a summary overview, that intra- and inter-disciplinary conversations might follow.

The second is to explore the issues of trust and trustworthiness as intrinsically geographical. This is the focus of part III. Where others have addressed either the sociological or the behavioural characteristics of trust (for example, Luhmann, 1979; Fukuyama, 1995; Misztal, 1996; Sztompka, 1999), or trust's political expression in different national context (Cleary and Stokes, 2009), or asserted that trust has a history (Hosking, 2006; 2014), even a temporality (Barbalet, 1996; 2009), I want to consider trust's spatial expression. More strongly, I want to propose that trust in several senses has a geography. Consideration of trust's spatial dimensions begins, I contend, by our being attentive to its situatedness and to its scale. By the first I mean the institutional or personal settings in which interpersonal trust is established and maintained between individuals. By the second I mean

the ways in which what others have termed social or generalised trust (Fukuyama, 1995) is commonly addressed at the national level and in terms of social capital (Putnam, 2000).

Yet, while attention to the nature and making of trust in terms of its site, scale and social ‘reach’ – ‘the radius of trust’ as some have it (Delhey, Newton and Welzel, 2011) – is insightful, it does not go far enough in thinking about trust’s geographies. We need also to evaluate the ways in which trust and trustworthiness are secured – the ‘technologies of trust’ (Livingstone, 2003: 147) – and to consider the ways in which trust relationships are ‘inscribed in space’ (Shapin, 1994: 245). Rather than be overly concerned with what trust is, we ought more usefully to consider what trust does, where and how it works and to what end. No one could dispute that trust is vital in securing social and epistemological credibility in knowledge in place and across space. But it is important to differentiate this claim. Trust rests in the knowledge claim itself (*what* is being argued or told us). Trust is consequential upon the informant and their motivation (*who* is telling us and *why* we should place our trust in them). We must be attentive to the means by which we place trust and trustworthiness in people by virtue of the things used to inscribe trust, such as words, numbers or instruments (*how* and *where* trust is embodied).

Part IV, the locus of my third aim, takes a different tack. Here I address the idea of the ‘crisis’ in trust in the contemporary world, in politics and politicians, in expertise generally or in the degree to which trust may be placed either in science, the scientist, or in scientific or medical institutions (for example, Aupers, 2012; Critchley, 2008; Heckscher, 2015; O’Neill, 2002b; Rothstein, 2013; Shapin, 1995, 2004; Yearley, 2005). As these scholars note, lack of trust and mistrust is often expressed in a requirement to be accountable arithmetically unto others in our social and academic relationships. Questions of trust and mistrust over expertise in contemporary society stem partly from concern over who the experts are as well as from the moral authority presumed to be associated with expertise (Shapin, 1995; 2004). They

arise, too, from concern over what we might think of as the institutionalisation of mistrust, its instrumentalisation even, embodied in the languages of accountability and transparency. As Onora O'Neill observed of public life in her Reith Lectures on trust, 'high enthusiasm for ever more complete openness and transparency has done little to build or restore public trust. On the contrary, trust seemingly has receded as transparency has advanced' (O'Neill, 2002a: 68). In Part IV, I consider these issues as they relate to the institution of geography as a discipline. Part V, the Conclusion, addresses the implications for geography of these themes pertaining to trust and trustworthiness.

II On trust in general

In general terms, trust may be understood as 'a precondition for a well-functioning society', a way to handle 'the complexities of living in a risk society', or as 'a fundamental aspect of human morality' (Myskja, 2008: 213). More simply, trust is the intent not to deceive, is 'valuable social capital' and is 'not to be squandered' (O'Neill, 2002a: 7). Trust operates at the level of personal relationships and within and across social communities and geographical boundaries. Before expanding upon these points in identifying key themes and disciplinary perspectives, it is helpful to place trust and research into trust in historical context.

1 Trust: the intellectual history of an idea

Launching the *Journal of Trust Research* as a key outlet for 'critical insights into the unique features and roles of trust within and across disciplines' (Li, 2011: 1), business studies scholar Peter Li cited the rise in the number of studies on trust from the mid-1990s as a key justification for the journal's appearance: 395 articles on the topic in the 1980s to 1235 the following decade to 3172 between 2000 and 2009 (Li, 2011: 3). This recent sharp rise in the number of articles on trust has been paralleled by the number of books, notably, since 2001,

by the Russell Sage Foundation Series on Trust.¹ However, this relative recency in the formal study of trust masks not only differences within and among disciplines – the *Journal of Trust Research* is dominated by studies of trust in management research and organisational studies – but also obscures the intellectual genealogy of the topic.

Several commentators place the origins of modern interest in trust within the Western philosophical tradition to German sociologist Georg Simmel in the later nineteenth and early twentieth century, notably to his *The Philosophy of Money* (1907) [*Die Philosophie des Geldes* (1900)] (Möllering, 2001; Mistzal, 1996; Simmel, 1950). Simmel's brief but influential treatment of the differentiation of trust in particular social circumstances has been an important stimulus, notably for intersubjective trust (Frederiksen, 2012; Möllering, 2001). Yet Simmel's work, and modern attention to trust more widely, has influential precursors.

Trust features in the work of the seventeenth-century English philosophers Thomas Hobbes and John Locke, being variously regarded as a moral bond between individuals in society and as the basis to the political covenant connecting a ruler and his people. For Locke, trust was a central feature in governance: the constitution of its legislative structure (and trust in it) was (or should be) the first fundamental act of any civilised society (Dunn, 1984). For Hobbes, trust in governance allowed humans to rise out of the state of nature. Trust relationships, in terms of socially-mediated constraints upon the absolutism of kings or other rulers, or in regard to those matters of mutual trust and accountability we extend one to another in market exchange, all feature in modern-day discussions of trust, notably in political systems. These were pressing concerns in the seventeenth century given the political and religious upheavals of the English Civil War and the Glorious Revolution, as Locke and Hobbes knew (Anderson, 2005; Baumgold, 2013; Weil, 1986). They are no less urgent now. Key questions concerning trust in science, what it was, how it was undertaken, where, and by

whom similarly have their origin in seventeenth-century English civil society and conceptions of social order (Shapin, 1994).

In the Enlightenment, trust features in the work of David Hume, Adam Smith, and Immanuel Kant amongst others. Hume's interest in trust is most clearly expressed in his *Treatise of Human Nature* (1739–1740). Hume's argument was that improvement in the material conditions of life is only possible if people respect the laws of justice. These may be summarised as stability of possession, the transference of possession by mutual consent, and the performance of promises. For Hume, 'trust corresponds with the third of these laws' (Bruni and Sugden, 2000: 28). That is, trust is a basis to practices of mutual benefit. The working out of such benefits tend to a reputation for trustworthiness (credibility). Trust and trustworthiness could be arrived at in several ways and in different context. In natural philosophy, 'There is no Algebraist nor Mathematician so expert in his science, as to place entire confidence in any truth immediately upon his discovery of it, or regard it as anything, but a mere probability'. In trade, 'Merchants seldom trust to the infallible certainty of numbers for their security; but by the artificial structure of the accompts, produce a probability beyond what is deriv'd from the skill and experience of the accomptant' (Hume, 1740: I, 316, 317). For Smith, notably in his *Theory of Moral Sentiments* (1759), justice was a precondition to the establishment of markets. Markets were dependent upon networks of association founded upon questions of mutual self-interest. Smith's 'theory of rational trust' as others term it (Bruni and Sugden, 2000: 35) presents us with something approaching a theory of reputation. Importantly, it offers a view of trust as a matter of social capital in terms of the 'thickness' of social relations as the consequence of networks of civic engagement. Kant's approach differs in emphasising both the importance of laws to allow the autonomy of individuals to act trustingly, and trust as a moral duty: for Kant, trust is about a lack of deceit, trusting others primarily a matter 'of not being deceived or coerced' (Myskja, 2008: 215).

Unearthing in further detail the roots of our contemporary interest in trust is not my concern here. These few remarks are intended only to show that contemporary diverse interests in trust have prior complex expression. Adam Smith in particular saw trust as a ‘modern’ phenomenon, the product of a commercial society. In his views we can discern the foundations upon which later theorists have built regarding social or generalised trust as social capital (Putnam, 2000; Fukuyama, 1995). Arguably, Hume’s attention to promissory obligations and mutual benefit within individuals’ undertakings foreshadows Hardin’s focus upon ‘encapsulated trust’ (Hardin, 2002). Hume’s recognition of the supposed infallibility of numbers and the authority of the accountant to give numbers meaning might be interpreted as a precursor to later accounts of trust in numbers as the basis to social facts and social policy (Poovey, 1998; Porter, 1995). As others have cautioned, however, considering trust as modern in these senses ‘is not to be confident about the reproducibility of trust in market economies at the beginning of the twenty-first century’ (Bruni and Sugden, 2000: 44). If the unfettered expansion of markets causes civic networks to decay rather than to flourish, if trust is measured more in the metrics of accountability and transparency than it is performed as a moral and mutually beneficial relationship, then we have reasons both to be anxious and to take the study of trust seriously.

2 Key themes and disciplinary perspectives in the modern study of trust and trustworthiness

It is hard to know where to begin a survey of trust. Lewis and Weigert’s 1985 paper usefully summarises work on trust at the moment the topic was, in their view, still ‘an underdeveloped concept’, in sociology at least, its study there and then apparent in only a ‘regrettably sparse literature’ (Luhmann, 1979: 8). The paper, and the same authors’ reflection almost thirty years later upon the sociological nature of trust (Lewis and Weigert, 2012), provide chronological markers helpful in review of contemporary work on trust. As will become

clear, however, theirs is a perspective from particular epistemological and disciplinary standpoints.

For Lewis and Weigert (1985), the intention was less to review trust overall and more to claim trust as a central tenet of sociological investigation whose origins lay variously in the works of Simmel (1950), Luhmann (1979), and Barber (1983). ‘From a sociological perspective’, they argued, ‘trust must be conceived as a property of *collective* units (ongoing dyads, groups, and collectivities), not of isolated individuals. Being a collective attribute, trust is applicable to the relations among people rather than to their psychological states taken individually’ (Lewis and Weigert, 1985: 968: original emphasis). Further, trust was a functional prerequisite for the possibility of society at all – in reducing risk and complexity (this a central feature of Luhman, 1979). These claims raised the issues of ‘how trust in other persons and institutions is established, maintained, and when necessary, restored’ (Lewis and Weigert, 1985: 969). For them, an adequate conceptual analysis of trust should begin by recognizing its cognitive, emotional, and behavioural dimensions.

From this three-fold taxonomy of trust as something intrinsically social and collective rather than individual and calculative, they distinguished between personal trust and system trust. Personal trust they took to be largely a matter of cognitive and emotional and behavioural ties between individuals. System trust was that which we invest in the institutions of civil society – ‘in the monetary system, in the legitimacy of political leadership and authority, in educational and religious institutions’, and so on (Lewis and Weigert, 1985: 974).

Lewis and Weigert’s expressed hope in 1985 that the several treatments regarding trust as a social reality ‘point to the need for a formalized and integrated sociological theory of trust’ (Lewis and Weigert, 1985: 982), has not been realized: that is, an integrated sociological theory of trust has not eventuated however much the need for one may remain. In part, this

may reflect the volume of work on trust since 1985. As they remarked in 2012 and as Li's statistics suggest, the study of trust 'remains theoretically fecund and empirically cumulative' (Lewis and Weigert, 2012: 29). If this is especially true of sociological perspectives, it is also because of the variety of work on trust. Other areas of scholarship were not subject by them to similar scrutiny. Even so, they concluded, 'the search for new modalities of trust continues apace' (Lewis and Weigert, 2012: 28).²

For political scientist Russell Hardin, trust is to be understood as encapsulated interest, cast as a three-part relation: A trusts B to do x (Hardin, 1992: 154). What matters in the encapsulated-interest account of trust is not merely one person's expectation that another will act in certain ways but, as Hardin personalises it, 'my belief that you have the relevant motivations to act in those ways, that you deliberately take my interests into account because they are mine' (Hardin, 2002, 11). As Hardin further elaborates:

The encapsulated-interest account backs up a step from a simpler expectations account to inquire into the reasons for the relevant expectations – in particular, the interests of the trusted in fulfilling the trust. The typical reason for the expectations is that the relations are ongoing in some important sense. There are two especially important contexts for trust: ongoing dyadic relationships and ongoing – or thick – group or societal relationships. (Hardin, 2002: 14)

Trust is seldom one-way, although it may be first formulated in that sense in the trust placed by a child in its parents (Kohn, 2008; Uslaner, 2002: 4). More usually, mutual trust at the individual level – 'on-going dyadic relationships' – involves interaction as part of relational exchanges between the parties concerned. Trust as 'thick relationships' is 'grounded in a complex of overlapping iterated interactions' (Hardin, 2002: 21), either within a small and perhaps geographically proximal community or, over distance, in persons with whom we have reason to trust.

This is to hint at two expressions of trust's geographical dimensions – its making in social groups and its inscription over space. It also alerts us to the key issue of trustworthiness. For Hardin, 'In general, the complexity of the problem of trust derives partly from the complexity of the problem of trustworthiness' (Hardin, 2002: 31):

Trust is little more than knowledge; trustworthiness is a motivation or a set of motivations for acting. Motivationally, there is much to be explained about why someone acts as though with trust when there is little ground to believe that the other is trustworthy, so that, in fact, there is little or no trust. The explanation of your actually trusting in some context will be simply an epistemological, evidentiary matter – not a motivational problem. The explanation of your trustworthiness can be simple or complicated, and it will depend on motivation. (Hardin, 2002: 31)

This disposition to trust as a matter of rational choice, and Hardin's claim about trustworthiness as a matter of motivation, may be considered moral and, at heart, utilitarian concerns. Thus understood, to trust and to be trustworthy is the right, proper, and mutually beneficial thing to do and to be – because of one's office, because of the responsibility placed in you by others. It is with regard to the obverse of this sense of moral good in people and in institutions that concerns are expressed over the current 'crisis in trust', the loss and betrayal of intersubjective or personal trust and, even, of system trust (Aupers, 2012; Rothstein, 2013). For who, or what, can you trust if not the police, priests, politicians, physicians, or bankers? But this is to make two errors. The first is to assume there is a crisis of trust in contemporary society. There is much talk to this effect, but little empirical evidence: 'we still constantly place trust in many of the institutions and professions we profess not to trust' (O'Neill, 2002a: 13). The second is the elision of trust with trustworthiness. Trustworthiness is more than the disposition to trust. It is a quality of the truster but also, and more, of the person or thing in which trust is to be placed. Trustworthiness may also be rooted in social norms in the

sense that certain institutional arrangements become the accepted means through knowledge claims are effected as cooperative activities – in speech, for example, where the claim to the ‘truthfulness’ of one’s word is a form of trustworthiness (Williams, 2000: 88–93). One can have trust in the idea (and ideals) of responsible government, an accountable police force and so on, and yet admit to their imperfect conduct in reality. Admitting that trust and trustworthiness are intimately related, trust may be seen as confidence in the actions or motivation of others, trustworthiness as credibility – the attributes of others (persons or things) which inclines us to place trust in them (Hardin 2002: 28–53, 55–66).

Trust as a two-part relation is also apparent in social or generalised trust. This may be understood as ‘trust in random others without grounding in specific prior or subsequent relationships with those others and, . . . without taking into account the variable grounds for trusting particular others to different degrees’ (Hardin, 2002: 60–61). Work on generalized or social trust falls broadly into two schools. The first considers social trust at the level of the individual where the connections between trust and personal or social attributes are presumed consequential (trust in relation to gender, age or social class, level of education, income, for example: Delhey and Newton, 2003). Differences exist within this approach. For Uslander (2002), social trust is the result of two personality traits, optimism and perceived control in life. For others, social trust rests on ‘social success’: an individual’s social and economic characteristics influence their level of trust in those others with whom they do not have direct ‘thick’ contact (Delhey and Newton, 2003: 95–96; Hamamura, 2012).

The second considers social trust as a collective attribute of social or national systems. Here, social or generalised trust is related to the nature of society as a whole. Social trust is a core component of social capital (Barbalet, 2009; Fukuyama, 1995; Misztal, 1996; Rothstein, 2013). To Robert Putnam, social capital means those features of social life that ‘enable participants to act together more effectively to pursue shared objectives’ (Putnam, 1995:

666). For Francis Fukuyama, social capital is simply ‘the ability of people to work together for common purposes in group and organizations’ (Fukuyama, 1995: 10).

One argument commonly advanced is that societies which sustain high levels of personal networks and associational activities have a greater degree of trust than those where such networks and activities have attenuated or where the institutions of governance and of civil society work against those ‘thick’ social relationships upon which trust, either interpersonal or social, may depend. Fukuyama distinguishes, for example, between ‘low-trust societies’ and ‘high-trust societies’. In the first, trust is less prevalent, even absent, despite the persistence of values and units which, in liberal democracies, might otherwise have been supposed to promote trust. To historian Geoffrey Hosking, ‘The Land of Maximum Distrust’ was the Soviet Union in the 1930s (Hosking, 2014: 9–21). High-trust societies (commonly, the Nordic countries: see Delhey and Newton, 2005) are distinguished by the ‘strength’ of trust in general, in the institutions of government, in the workplace, in individuals’ personal relationships (Fukuyama, 1995: Parts II and III, respectively). Although most research on generalised or social trust and social capital is undertaken at the national level (Delhey and Newton, 2003; 2005; Frederiksen, 2012; Gustavson and Jordahl, 2008, for example), it has been investigated at the neighbourhood level (Wilkinson and Pickett, 2007).

If this discussion of social or generalised trust anticipates further geographical dimensions to trust – trust at the level of the nation, at neighbourhood level, even at the level of the individual, each in relation to socio-economic indices, as well as in the international dimensions through which trust is secured in scientific institutions such as IPCC – several cautionary remarks may be made. Most studies of generalised or social trust depend upon the widely-utilized survey-based methodology drawn from the World Values Survey and, in particular, use of the standard question: ‘Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?’ This question,

which has been the source of criticism (Uslaner, 2012), is sometimes supplemented by further questions designed to solicit the degrees of trust in different social groups. These two questions – ‘trust in most people’, and ‘trust in mere acquaintances’ – are allied to socio-economic data at aggregate level (Hamamura, 2012: 502). Such aggregation obscures the bases to trust for individuals. It masks variation within the nation concerned. Most crucially, it tells us little about the cause and effect relationship between trust and social life. As two leading commentators in this context note, ‘And is integration into an informal social network likely to generate trust, or is it that the trusting have good social contacts? It is impossible to tell from our data’ (Delhey and Newton, 2003: 114). While social trust at national level associates trust with socio-economic indices, it both conflates trust with trustworthiness and overlooks the circumstances behind an individual’s or a group’s motivation to trust.

Trust is everywhere, and everywhere imprecisely defined. The distinctions noted do not fit neatly within disciplinary boundaries. Research interest in trust has been strongly managerialist, social (and sociological) as well as interpersonal. It has been a concern of political scientists, Hardin (2002) emphasising trustworthiness as a matter of motivation. Trust’s temporal dimensions have been studied. Although, for Hosking, it is possible to see ‘six conjunctures in European history’ when ‘trust broadened relatively rapidly, to create new kinds of social cohesion’ (Hosking, 2006: 109), trust has only recently become an explicit focus for historians.³ The connections between geography and trust have not been subject to systematic enquiry.

III Trust and geography

The foregoing has disclosed the geographical dimensions of trust in other disciplines. What follows distinguishes between research into trust by geographers and the study of trust in the institutions and practice of geography as a discipline.

1 Trust studies in geography

Cultural geographer David Matless has described trust as ‘A quality that gives statements, individuals or organizations credibility and authority’ (Matless, 2009: 777). ‘Trust’, wrote Matless, ‘has become an important theme in areas of human geography concerned to understand processes of knowledge credibility and transfer’ (Matless, 2009: 777). Although he did not draw upon that work in other subjects summarised above, he did identify two areas in particular: economic geography, and the geographies of scientific knowledge.

Matless’s acknowledgement of economic geographers studying trust in financial context drew on but one paper – Alan Hudson’s work on trust, place and the social construction of offshore financial places with reference to the Bahamas and the Cayman Islands (Hudson, 1998). What we might see as encapsulated trust (Hudson did not use the term) followed from bankers dealing with one another on a daily basis – in the institutions, on the islands, and within the global banking system. Trust was established by virtue of the trustworthiness placed in financiers as a result of their personal knowledge, and because of the thickness of the social and fiscal connections that sustained the institutions and networks involved. For Hudson, trust was inscribed in place: ‘Places are temporary trusted regulations in the dynamic socio-spatial landscape; they are the site and outcome of processes of regulatory bargaining’ (Hudson, 1998: 934). Li (2010) examined trust in Chinabank, in London and Beijing and as a commodity sustaining the ‘stretched geographies’ of global finance (Li, 2010: 20).⁴ It was just such issues of trust in offshore banking (in the sense of a formal trust fund and as relationships of trustworthiness inscribed in place) that exercised David Cameron, then the UK Prime Minister, in April 2016 following mounting public distrust over his offshore financial arrangements.⁵ Similar issues, notably the relationships between people in their workplace, what she called the ‘multiple rationalities’ of emotive trust and capacity trust on

the factory floor, featured in Nancy Ettlinger's study of trust in cultural economic geography (Ettlinger, 2003). Murphy (2006) usefully reviews the centrality of trust in the economic spaces of financial institutions and global exchange. Though not a geographer, Joni likewise addressed structural trust, personal trust and expertise trust in financial and political institutions (Joni, 2004). In these studies, trust in the workplace is treated almost as a commodity, inseparable from capitalist property relations.

Before turning to the second area identified by Matless, other geographical studies on trust should command our attention. Secor and O'Loughlin explored the connections between social or generalised trust, politics, and social capital comparatively for Moscow and Istanbul and at the neighbourhood level within these cities using the survey-based method of the World Values Survey (Secor and Loughlin, 2005). Both countries were 'low trust societies' on the World Values Survey. Political trust was generally higher in Turkey than in Russia, and was strongly so in both countries in relation to the armed forces and 'democratic system'. Trust in the police, the legal system and in parliament was low in both cities, always lower in Russia. Broadly, trust in one's fellow citizens in Istanbul exhibited a positive relationship to associational activities. In Moscow, social trust was largely explained in terms of lower socio-economic status. In both cities, residents with lower socio-economic status and lower propensity to engage in direct political action were found to be more trustful of parliament. There were marked neighbourhood differences in levels of trust in both cities. In sum, social trust in these two cities in these 'illiberal democracies' was the opposite of what has been found for Western democracies (Delhey and Newton, 2003, 2005; Fukuyama, 1995; Putnam, 2000). Their further point in conclusion – that the contingencies of place matter – accords with the institutionally-focused studies of Hudson (1998), Ettlinger (2003), Li (2010) and Murphy (2006) but for different reasons. Even as they acknowledged geographical variation in trust at different scales – nationally, between cities, within cities – the cause-effect

relationships between social trust and social-economic circumstances capital were unclear. In using the survey-based methodology and its standard question, they are always likely to remain so.

Stephen Le, by contrast, is in no doubt: geography is a determinant of trust (Le, 2013). His claim that ‘Four major channels linking geography to trust have been widely mentioned in recent literature: disease, ethnic heterogeneity, income inequality, and economic growth’ (Le, 2013: 389) is unwarranted, from my examination of the extant literature at least. His regression analysis of those factors in relation to latitude, altitude, and the World Values Survey measure of trust founders in explanation of the cause-effect relationships, not least from being predicated upon a strongly reductionist view of geography as environmentally determinist. From an archaeological perspective, Penny Spikins has invoked issues of trust in attempting to explain global patterns of human population dispersal from the late Pleistocene (c.100,000 years bp): ‘The politics of ‘simple’ hunter-gatherers are by no means simple, and it is complex judgements of emotional commitments or *trust* which structure hunter-gatherer dynamics’ (Spikins, 2015: 5, original emphasis). This initial claim is not untrue (notwithstanding the difficulties of discerning Pleistocene politics). But any explanation of population movement and its environmental or social causation by appeal to ‘a high *trust metric*’ (Spikins, 2015: 5, original emphasis) (which is interpreted as a moral and emotive phenomenon rather than a collective and cognitive one and which conflates trust with trustworthiness) is destined to fail because it can never be adequately empirically tested.

Work on trust in the geographies of scientific knowledge is more concerned with personal or inter-subjective trust and with trust and trustworthiness as moral and epistemological matters. This work has drawn upon the attention paid by historians of science to trust and the making of science in seventeenth-century England (Shapin, 1994; 1998). This demonstrated how trust in science has social and spatial dimensions given the need to place trust in

information about distant or unknown geographies that have not been observed or experienced by the truster: ‘those who have not seen these things know them by trusting those who have, or by trusting those who have trusted those who have (Shapin, 1998: 8). From this work, as also from economic geographers’ studies of trust (but in different ways), we may be able to extend our thinking about trust and trustworthiness in human geography by considering not just in whom and where trust is inscribed but also how.

2 Extending trust in geography

In his *A Social History of Truth* (Shapin, 1994), historian of science Steven Shapin emphasises the importance of trust and social order. Trust is the ‘great civility’ (Shapin, 1994: 3–41). He recognises that the attribution of trustworthiness is not equally distributed among all human beings. Early modern natural philosophers reflected at length upon whom to trust, ‘but their solutions broadly followed the contours of social power’ (Shapin, 2010: 53). It informed the making of science by its dependence upon gentlemanly social hierarchy. Trust was the basis to truth claims, something ineluctably epistemological and moral. The truster trusted what he was told about people and places he had not experienced directly because trust was placed both in the fact and in the person recounting it. For Shapin, ‘Whenever, and for whatever reasons, those who judge observation-claims cannot be at the place and time where the phenomena are on display, then judgement has to be made ‘at a distance’.’ This is what is meant when he writes that ‘The trust relationship is, in that sense, inscribed in space’ (Shapin, 1994: 245).

Shapin’s *Social History of Truth* is a lengthy, wide-ranging, and theoretically sophisticated treatment of the personal, moral, and epistemological connections sustaining truth, trust, and testimony. His argument has been seen almost as foundational for several scholars who have examined trust in geographical knowledge and in exploration (for example, Driver, 2001;

Livingstone, 2003; Withers, 1999, 2004) as it has been in the history of science (Golinski 1998). In the context of this review, several further observations may be made.

It is, in the main, a study of individual or interpersonal trust and of trustworthiness, not at all of social or generalised trust. It might be said to be concerned with system trust in as much as it focuses upon the (newly-formed) Royal Society of London as an institution for the promotion of natural philosophy. In focusing upon seventeenth-century England, however, it is not straightforwardly applicable to other places and periods. Socially circumscribed networks of trust-based familiarity and intellectual exchange are no longer the norm. Arguably, they ceased to be so during the nineteenth century. In displacing natural philosophy in that period, Science (properly, the sciences), was distinguished by the emergence of standardised analytic procedures, professional practitioners and institutional structures, and by the codification of practices and personnel into recognisable (though not always discretely definable) disciplines (Cahan, 2003; Golinski, 1998). ‘The professionalization of science transformed the understanding of what constituted trustworthy character’ (Rolin, 2002, 102).

Paradoxically, disciplines may today be weakening in the face of calls about inter- and trans-disciplinarity (Barry and Born, 2013; Graff, 2015). Yet concerns over trust, expertise and the presumed moral and political authority of the expert have become even more common in contemporary society. If disciplinary specialism is either lost or weakened and yet such specialism is the basis to that expertise by which we are judged credible in our field, we do need to be careful about the professional and the moral norms against which we are presumed trustworthy by the several audiences we work with (Shapin, 1995; 2004). Shapin observed as much in speaking of the modern condition: ‘We trust the reliability of airplanes without knowing those who make, service, or fly them; we trust the veracity of diagnostic medical tests without knowing the people who carry them out; and we trust the

truth of specialized and esoteric scientific knowledge without knowing the scientists who are the authors of its claims. Abstracted from systems of familiarity, trust is differently reposed but vastly extended' (Shapin, 1994: 411).

The equation presumed between truth and trust, veracity and virtue, as necessarily following the contours of a gentlemanly social hierarchy is not applicable in the modern period for two further reasons. The first concerns its obvious gender implications. We still have little systematic evidence over 'gender bias in the evaluation of intellectual character' (trustworthiness) (Rolin, 2002: 102), despite the advances made by feminist perspectives in science studies and in geography (Haraway, 1991; Harding, 1986; Rose, 1993). The second concerns the place of tacit knowledge and indigenous expertise in the making of trustworthy geographical knowledge. Here, what has been claimed as credible geographical knowledge by trustworthy sources (usually white, but not always men) was often crucially dependent upon indigenous interlocutors even as it performed a kind of epistemological 'double movement': the written claims of explorers denied the verbal testimony of those indigenous people upon whom they depended, both for safe passage and for the facts themselves (Barnett, 1998).

The connections between interpersonal or intersubjective trust (a moral and epistemological relationship), trustworthiness (credibility), and testimony (written and verbal) are important to discern for any study within geography that uses trust in that sense. They are, arguably, particularly important in the study of exploration narratives and travel accounts in historical geography and related fields (Keighren, Withers, and Bell, 2015). Consider in this context the issue of disguise. In its more practical senses – adopting suitable dress, for example, or learning a language – disguise was a matter of security and of common sense. But disguise raises fundamental questions regarding the trustworthiness of the explorer-author. In disguising oneself, however well intentioned one's motives, the author runs the risk

of being taken for what he or she is not and of soliciting information by underhand means. There are key issues here for the traveller, for the researcher, and for the researched. For the traveller, trust has to be obtained in order to secure safe movement across space and, later, for the printed words to carry credibility as they too move across space. The demands of practicality need to be balanced by those of propriety: travellers regularly had to alert indigenous rulers of their intention to move across territories under others' control. They did so by writing ahead to secure safe passage. But, often, travellers did not correspond in their physical appearance or in their stated objectives with who they said they were and why they were travelling. Disguise takes many forms. But, at its heart, it is a form of lying, of self-serving interests not of encapsulated trust. It embodies an intent to deceive in order to serve particular interests. For the researcher and the researched, we need to consider how trust and trustworthiness was secured, and what motivations we have in our hermeneutic enquiries using others' words (Breeman, 2012).

Trust is implicit in assessment of others' texts as geographical sources. We take on trust – largely, because we do not otherwise presume to question it – the 'thickness' and the content of the connections between the fact recounted, the trustworthiness of the author and of the publisher: what one philosopher has called that 'transmission chain' linking testimony and truth (Coady 1992, 47). But the route taken by the spoken testimony of one person in one place before becoming written words in another place can be complex (Keighren, Withers and Bell, 2015; Craciun, 2016). This is to emphasise the place of the published text (and its manuscript correlates) as a locus of trust. There are other 'technologies' in and through which trust is inscribed: the map, the topographic print or painterly representation, the camera and photography (Livingstone, 2003: 147–178). In a modern context, we uncritically place overmuch trust in the content and the organising systems of social media (often with unfortunate consequences). Historically and today, scientific instruments (meaning here those

portable manufactured devices through whose use we ‘translate’ natural processes into measurable quantities and from which we infer both accuracy and precision) are likewise a technical basis to trust. We place our trust in instruments: their readings underlie those writings by others that are our findings. Yet many narratives of exploration presented their findings as true despite the instruments involved running slow or breaking; that is, the technologies used to inscribe trust may undermine rather than endorse the truth claims made (Rae, Souch, and Withers, 2015).

These comments may extend geographical interests around interpersonal trust and trustworthiness into humanities disciplines – literary studies, book history, art history, instrument history even – where, history’s recent exception and the work of some moral philosophers aside, the topic has not been to the fore. At the same time, I am not presuming that wider shared interests will necessarily share common ground. Some practitioners, in geography or elsewhere, will continue to address social or generalised trust, others trust in its institutional settings, or trust and trustworthiness as bases to testimony. My remarks are not to presume a primacy of one study or method over another. They are to caution that while human geographers might look more closely and extensively at trust as a research question than we have to date, we will need to be careful what ‘type’ of trust it is we are working with, what the nature of the problem is, and what our motivations are.

IV Trust and trustworthiness in science: geographers’ lives and geography’s institutions

Matless (2009) recognised (but did not expand upon) the structural and institutional place of trust in geography itself: ‘The geographies of trust also encompass the questions of why geographers should be trusted, why the discipline should have credibility and who counts as a trustworthy geographer’ (Matless, 2009: 778).

One start point helpful to thinking about these issues is that range of work on trust within science studies. Here, too, the topic is relatively recent, the coverage considerable and, in several ways, strongly revisionist. In his 1987 paper ‘Trust in Science’, the sociologist Bernard Barber considered trust in science to be a matter of scientists’ competence – was the procedure competently performed? – and of ‘the reposing of fiduciary obligations and responsibilities’, wherein the obligations inherent in a scientist’s role, to colleagues, to the institution, were above the scientist’s own immediate interests or anticipated advantage (Barber, 1987: 123). Twenty years later, in a paper to the same title, sociologist Piotr Sztompka likewise argued that ‘Trust in science means in effect trust in scholars and their actions’ (Sztompka, 2007: 211). In part, Sztompka’s agenda in looking at trustworthiness and trust and the ethos of science reflected his interest in reviving Robert Merton’s now-classic 1942 statement on the four principles for the ethos of science: universalism, communalism, disinterestedness and organized scepticism. ‘Each of them’, Sztompka argued, ‘is shown to facilitate or even evoke the truthful, competent, sincere and honest – in brief: trustworthy – conduct of scholars’ (Sztompka, 2007: 211). Here, trust is an essentially moral matter. Sztompka drew upon Hardin’s model of encapsulated trust – (A trusts B to do x) – to ask ‘What is X in the case of science?’ (Sztompka, 2007: 213): ‘It is the search for truth (as the primary goal), and for relevance, utility, practical applications – therapeutical, technical, sociotechnical (as the secondary goal’ (Sztompka, 2007: 213).

In part, however, Sztompka’s treatment of trust and trustworthiness recognised that neither Merton’s idealist account nor simple rationalist-cum-moral claims about trust in science – that we trust science to bring us closer to the truth – hold in a world of ‘post-academic’ science. For Sztompka, ‘Five recent developments in science as an institution and as a scientific community undermine the foundations of trust’ (Sztompka, 2007: 218). The first is what we might call the ‘fiscalization of science’, where the need of more resources for

funding science results in the dependence of science on external agencies: funding comes with strings attached; the policy requirements of the funder may not align with (encapsulate) the interests of those undertaking the work. ‘The second process undermining trust is privatization of science’ (Sztompka, 2007: 218) where research is owned by the sponsoring institution (via patents for example). The third is the commodification of science, where scientific results may take the form of a marketable commodity. The fourth is the bureaucratization of science: ‘Scholars become absorbed in the extensive red tape of project-writing, financial planning and reporting results’. That is, trust in the doing of science is replaced by mechanisms of accountability designed to judge its utility. Lastly, he identifies the ‘diminishing exclusiveness and autonomy of the scientific community: the Ivory Tower has been opened, and movement across its walls comes in both directions’ (Sztompka, 2007: 219: on this metaphor and its enduring significance, see Shapin, 2012).

Limitations of space prevent my fuller exploration of this argument, but several points may be made. It is doubtful that Merton’s claims ever fully held, everywhere and for all. Sztompka’s use of the labels ‘academic science’ and ‘post-academic science’ would have greater utility if grounded in a place or places and a period: the assumption (though Sztompka does not state it) is that his is an argument about the rise of academic ‘techno-science’ in advanced economies after 1945. To Sztompka’s stated reasons why ‘post-academic’ science has been attended by a decay in trust and increased requirements over accountability we might add the rise of public knowledge in science, tacit knowledge and expertise resting in persons other than academics and outside the confines of academic institutions. These issues are no less important in ‘amateur’ or citizen science – what others term ‘civic epistemology’ (Jasanoff 2005, 247–271). It is for these reasons that Stephen Yearley cautions the distinction between trust in the science itself, trust in the scientist, trust in the scientific institution, and scientists’ trust of the public’s understanding of science. Trust is ‘an indispensable

component in the creation and passing on of scientific knowledge' (Yearley, 2005: 123), but the relationship is no longer one way (if it ever was) – from scientist to lay public. Trust and credibility are not fixed dispositions: they are negotiated outcomes borne of particular individual relationships, institutional settings and social connections.

Notwithstanding the caveats of place, period, and publics, Sztompka's arguments will strike a chord with most geographers. The fiscalization and bureaucratization of science is now an understood context to our work. In embracing the co-production of knowledge, in working as we do with a variety of public audiences and different institutions as well as practitioners in other disciplines, we are complicit in welcoming others into geography's Ivory Tower, as we in turn hope we are welcome outside it. Trust and trustworthiness are absolutely central to our scholarly and personal lives, to the research questions we pose (and have posed for us) and to the effective running of the institutions in which we work. In our research on contemporary social concerns, we aim to elicit the trust of our informants. If our research is historical, we trust the surviving evidence. Although there may be good reason to entertain doubt, we cannot always test the traces of the past any more than we easily and always seek to ratify other's testimony in the present. When our research is refereed, we take on trust that the referees have our interests at heart (A trusts B to do x). Is not such encapsulated trust essential to the collective motivation we have in advancing geographical knowledge? Citation indices and impact factors suppose trust (and invite scepticism) in the numbers produced as a measure of consequence. The status of academic research – in the UK 2014 Research Excellence Framework for example (REF 2014) – invites trust in the metrics used to grade research quality, and its impact upon non-academic audiences.

I know all this happens even as I am unsure how, exactly, trust (and trustworthiness) work in geography. Are we as geographers trusted more (that is, are we more trustworthy) than the practitioners of other subjects? A 2014 survey of several hundred economists found that 94

per cent admitted to having engaged in at least one unacceptable research practice (we are not told what) (Necker, 2014). A 2016 Wellcome Trust survey of trust in science and in the biomedical sciences in Britain found men more trusting than women of doctors, nurses and other medical practitioners; younger adults more trusting of medical research charities than older adults; and found that trust in the subject and in the institutions of science was predominantly secured through the Internet (*cf.* Aupers, 2012; Fredericksen, 2012 who examine trust in the Internet). Trust in the personnel was secured through direct contact. Scientists working in universities were trusted more than those employed by medical research charities. Journalists were trusted least of all (Wellcome Trust, 2016: 8–9). Public trust in science changes over time, of course, by subject, in relation to types of practitioners, and by country as has been shown for the United States over the last thirty years in relation to political affiliation (Gauchat, 2012). Jasanoff's study of civic epistemology – the institutionalised practices by which members of a given society test and deploy knowledge claims – shows that trust, in public accountability, in individuals, and in the institutions of science, varies between Britain, the United States and Germany (Jasanoff 2005: 247 – 271). Here, too, are further geographical dimensions to trust demanding scrutiny.

Is geography to be trusted? How does trust work within geography? Are geographers trustworthy? These things, I contend, do matter. But I am not supposing that human geography has reasons by virtue of its intellectual range and depth to be trusted any more or less than other subjects. I cannot say that geographers are any more or less trustworthy than their fellow academicians. I have no means to offer judgement in that respect. Does the public trust geography? The public, and politicians, judge our trustworthiness – they presume it at least – when geographers are called upon as expert witnesses or work as part of formal governmental bodies (Owens, 2015), or when our work is deemed to have 'impact' (Bastow, Dunleavy and Tinkler, 2014). I know of no survey of trust in geography or in geographers. So

far as I know, the subject has never had its ‘Piltdown Man’ moment, that act of contrived anthropological fraud in 1920s England intended to deceive the world over humanity’s origins (Walsh, 1996). Nor has it had its ‘Rum Affair’ where the academic botanist, John Heslop Harrison, proposed that the vegetation on the inner Hebridean island of Rum had survived the last Ice Age and so represented a Pleistocene botanical refugia before his fraud was exposed by a member of the public (Sabbagh, 2000). Perhaps I am the trusting sort. But then, we all are. We have to be. Trust in geography is a desideratum.

V Conclusion

‘Once an amorphous concept of limited interest, trust is now treated as a critical factor in social relations at all scales, from dyads to nation states’ (Zand, 2016: 68). ‘Trust is one of the most fascinating and fundamental social phenomena yet at the same time one of the most elusive and challenging concepts one could study’ (Lyon, Möllering and Saunders, 2012: 1). Whatever trust is – interpersonal, system, structural, intersubjective, encapsulated, or social and generalised – it is a commonplace within many disciplines but has featured much less in human geography.

This paper has proposed a three-fold distinction: between the geographical dimensions of trust evident in work by non-geographers; research on trust within geography; and trust in the doing of geography. In the first, trust’s geographical dimensions have been implicit when they have not been altogether overlooked. Yet, questions of the placed nature of structural trust in institutions, or of social trust within and among nations, point to important spatial differences in the constitution and circulation of trust: even in particular sites such as the laboratory (Barrara, Buskens and Raub, 2012). Knowing what trust is and does is partly a consequence of the method chosen to disclose it. Social trust is commonly examined at the national scale, with reference to a survey-based methodology and to socio-economic indices.

To date, only a handful of geographers have examined social trust in these terms, with other studies principally addressing either institutional or structural trust, or the bases to trustworthiness in historical context. Trust in the discipline itself, in the doing and living of geography – in the performance of our promises to paraphrase David Hume – has not hitherto been addressed.

The implications of trust's variable presence in geography are several. Human geographers might turn to work more with trust by simply sharing the insights of other disciplines. Lyon, Möllering and Saunders identified five main themes of research into the topic: the dynamic process of trust; the tacit elements of trust; trust in cross-cultural perspective; the role of researchers in shaping trust in the situations being researched; and the research ethics of trust (Lyon, Möllering and Saunders, 2012: 11). It is unlikely that these issues will be taken up equally by those several subjects for whom trust is a leading topic of research or by human geographers. Our work with trust is likely to speak to particular interests and to reflect some, but not all, of trust's different expression in cognate fields. Political geographers (to take one example) concerned to examine the connections between social capital and trust in government at either national or neighbourhood scale will have a different sense of trust – and results to their work – than if they chose to study the trust-based workplace relationships of individuals in a political institution. Economic geographers have led in the geographical study of trust as a socially situated commodity. Historical geographers trust others' written words and inscriptive traces. Climate scientists trust their data: yet the public (and some politicians) does not uniformly accept the interpretations made of them, the institutions they make it from or, even, individual scientists themselves (Hulme, 2009). The scale and the sites with which we work with trust, and the methods we use, are important.

There is more to know about the placed nature of the institutional settings within which trust is at work: because trust and trustworthiness are everywhere and, potentially,

everywhere differently made and secured, it is pertinent to consider just how trust is enacted in, say, environmental agencies (Owens, 2015), police stations, courts of law, universities. How is trust inscribed in place? And because trust is inscribed in space – that is, it moves over space and over time – it behoves us to know more not just about the bases in personal trustworthiness by which geographical knowledge was made credible. We need to know more about the means by which trust is secured, now and in the past: from promissory declarations, as verbal statements since transcribed, from written testimony subject to corroboration, as the printed word after review, in numbers whose originating purpose may be more important than the figures themselves. Trust is more often placed in numbers than it is in words, commonly if not always accurately because of the widespread misconception of quantitative data as ‘objective’, neutral because mathematically determined (Porter, 1995). In the United States in particular, one established method for demonstrating objectivity in public decisions – and inviting trust in the data and the decisions – has been as Jasanoff has it, ‘to clothe the reasons for allocative choices as far as possible in the language of numbers’ (Jasanoff, 2005: 265). But as David Hume well knew, numbers derive their authority not from themselves but from their creators, to suit an end in view. There might, even, be benefit in evaluating the public understanding of geography, public trust in geographers and in its institutions. Trust – in geography – has rich possibilities indeed.

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Notes

1. The Russell Sage Foundation Series on Trust ‘examines the conceptual structure and the empirical basis of claims concerning the role of trust and trustworthiness in establishing and maintaining cooperative behavior [sic] in a wide variety of social, economic, and political contexts’. Fourteen volumes in the RSF Series on Trust have been published since its launch. See www.russellsage.org/publications/category/Trust [Last accessed 8 August 2016].
2. In a note to their 2012 paper, Lewis and Weigert (2012) present a citation analysis of their own 1985 article, listing the ‘disciplinary headings’ of the paper’s citation in the period 2002-2011. Business and economics accounted for 52.4 percent of the citations:

social sciences subjects for only 10.9 percent. For them, ‘this citation distribution suggests that, although many questions in the sociology of trust remain for sociologists to explore, sociological research on trust dynamics is visible to and utilized by researchers in other disciplines. We hope this outcome will encourage more sociologists to contribute toward a deeper understanding of trust dynamics across all social institutions’. It is also the case that work undertaken on trust outside sociology – ‘by researchers in other disciplines’ – has been influential, in this period and before, yet they do not engage with it in any detail.

Other influential scholars on trust in other fields, such as Guido Möllering the leading business studies and management scholar, argued at much the same time that ‘Trust is in danger of becoming an insignificant sociological concept, one that is easily subsumed under decision-making and exchange theories’, unless, that is, it returned to its Simmelian routes and to the ways in which trust in intersubjective social relations especially was expected, interpreted, and (at times) suspended and was at all times subject to rigorous hermeneutic and reflexive approaches (Möllering, 2001: 417).

3. Hosking identifies these as Athens in the late sixth century; Rome in the first century BC; the city-states of medieval Italy whose political and commercial cohesion was stimulated by the provision of credit – ‘the economic version of trust’; in Antwerp and in Amsterdam as the centres of financial credit in the Low Countries between the fifteenth and seventeenth centuries; seventeenth-century England [on which context see my remarks here on Locke and Hobbes and Shapin (1994) on science and trust in science in that setting]; and after 1945, in the establishment of institutions such as the United Nations, the International Monetary Fund and the World Bank designed to enable nations to work together again after conflict – ‘to create in fact global structures of trust’ (Hosking, 2006: 110, 112, respectively).

4. I am grateful to Roger Lee for drawing this to my attention. Chapter 3 of Li's thesis offers an informed discussion of trust – notably system trust – in financial institutions.
5. This issue, widely reported upon at the time by the British media, focused on Cameron's initial denial that he had personal financial investments in a family-owned offshore (Panama-based) trust fund, his later dissembling and acknowledgement that he did have such involvement and, later still, Cameron's admission that he had made a profit from the trust fund concerned: see 'Cameron's trust problem', *The Guardian*, 16 April 2016.

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